

What We Know

- Distraction is a Prevalent Factor in Crashes
- Many Distracters, None Predominate
- Telematics Devices are not the Major Distracter (at least as reported by drivers)

Survey Results

<u>1994</u>	<u>1999</u>	<u>2000</u>
Listening to Radio	Tuning Radio	Talking
Drinking/Eating	Eating	Adjust Controls
Psychomotor Activity	Talking	Eating/Drinking
Reading Map	Reading/Writing	Dropped Object
Talking on Phone	Talking on Phone	Talking on Phone

What We Don't Know

How Distraction Contributes to Crashes?

Likely Not a Simple Case of “Eyes off the Road” more likely:

“Mind off the Road”

Research Evidence: ---

AAA Foundation for Traffic Safety

Handsfree phone as distracting as tuning a radio

Implications:

Cognitive task equally as distracting as psychomotor task

Handsfree phones don't eliminate distractions

Journal of Experimental Psychology

**Engaging in cognitive tasks adversely
impacts safe operating practices**

- Diminished Field of View
- Reduction in Travel Speed
- Reduced Scanning Frequency
- Fewer Mirror Glances

Insurance Corporation of British Columbia

Cognitive tasks not requiring drivers to “take their eyes off the road” affect behavior

Finding:

Drivers listening to messages accepted significantly shorter gaps in left turns

What Else Don't we Know

How Much Distraction is Too Much?

- In some environments, driving does not demand 100% of the driver's attention

How do we Quantify?

When Does Safety Diminish?

How do Driver and Environmental Factors Interact to Affect Safe Operation?

Most Critical Unknown

- Don't Understand the “Mechanism of Distraction” with respect to safety thus we don't know how to best mediate it
 - Eliminate?
 - Aid Driver?
 - Manage System Functions?
 - Improve Displays/Controls?

AAA's Approach

- Joining with other clubs to develop and deploy testing protocol
- Protocol measures “workload” in comparison to baseline in standardized scenarios
- Testing on Three Continents

AAA's Goals

- Work with Industry to stimulate development of the least distracting devices possible
- Discover how “Mechanism of Distraction” affects workload